IN THE CLAIMS

1.   (currently amended) A method of using a computer to generate an ultrasonic inspection planning for a part, said ultrasonic inspection planning containing information needed to meet specification requirements for an ultrasonic inspection, said method comprising:

collecting data relating to said ultrasonic inspection planning, said data including part geometry data and a revision sheet for said part;

using said data to calculate inspection parameters; and

outputting a set of inspection planning based on said calculated parameters.

2.   (canceled)

3.   (currently amended) The method of ~~claim 2 wherein~~ claim 1 wherein said data further includes a flow line image and a scan line image for said part.

4.   (canceled)

5.   (original) The method of ~~claim 2 wherein~~ claim 1 wherein said data further includes ultrasonic transducer characteristics.

6.   (original) The method of claim 1 further comprising generating an error proofing plot of said part and comparing said error proofing plot to a cross section drawing of said part.

7.   (original) The method of claim 1 wherein using said data to calculate inspection parameters includes calculating one or more of part rotational speed, part surface speed, transducer index speed, pulse repetition rate and scan length.

8.   (original) The method of claim 1 wherein said inspection plan document sets forth a sequence of inspection scans for said part.

9.   (original) The method of claim 8 wherein said document further includes a flow line image, a scan line image, inspection limits and a revision history for said part.

10.   (original) The method of claim 8 further comprising parsing said sequence of inspection scans to verify that all required scans are included.

11.   (original) The method of claim 1 further comprising adjusting said data for part curvature corrections.

12.   (currently amended) A method for automatically generating an ultrasonic inspection planning for a part, said ultrasonic inspection planning containing information needed to meet specification requirements for an ultrasonic inspection, said method comprising:

displaying an input screen for prompting a user to input data relating to said ultrasonic inspection planning;

calculating inspection parameters from said data; and

formatting said calculated parameters into an inspection plan document that sets forth a sequence of inspection scans for said part, said document including a flow line image, a scan line image, inspection limits and a revision history for said part.

13.   (original)   The method of claim 12 further comprising displaying an instruction screen.

14.   (original) The method of claim 12 further comprising generating an error proofing plot of said part.

15.   (original) The method of claim 12 wherein calculating inspection parameters includes calculating one or more of part rotational speed, part surface speed, transducer index speed, pulse repetition rate and scan length.

16.   (canceled)

17.   (canceled)

18.   (currently amended)   The method of ~~claim 16 further~~ claim 12 further comprising parsing said sequence of inspection scans to verify that all required scans are included.

19.   (original) The method of claim 12 further comprising adjusting said data for part curvature corrections.

20.   (original) The method of claim 12 wherein said data includes part geometry data for said part.

21.   (original) The method of claim 20 wherein said data further includes a flow line image and a scan line image for said part.

22.   (original) The method of claim 20 wherein said data further includes a revision sheet for said part.

23.   (original) The method of claim 20 wherein said data further includes ultrasonic transducer characteristics.

24.   (original) The method of claim 20 wherein said data further includes a proposed sequence of inspection scans.

25.   (currently amended) A computer-readable medium containing instructions for controlling a computer system to perform a method comprising:

displaying an input screen for prompting a user to input data relating to an ultrasonic inspection planning for a part, said ultrasonic inspection planning containing information needed to meet specification requirements for an ultrasonic inspection, wherein said input data includes part geometry data and a revision sheet for said part;

calculating inspection parameters from said data; and

formatting said calculated parameters into an inspection plan document.

26.   (original) The computer-readable medium of claim 25 wherein said instructions further cause a computer system to display an instruction screen.

27.   (original) The computer-readable medium of claim 25 wherein said instructions further cause a computer system to generate an error proofing plot of said part.

28.　　(original)　The computer-readable medium of claim 25 wherein calculating inspection parameters includes calculating one or more of part rotational speed, part surface speed, transducer index speed, pulse repetition rate and scan length.

29.　　(original)　The computer-readable medium of claim 25 wherein said inspection plan document sets forth a sequence of inspection scans for said part.

30.　　(original)　The computer-readable medium of claim 29 wherein said document further includes a flow line image, a scan line image, inspection limits and a revision history for said part.

31.　　(canceled)

32.　　(currently amended)　The computer-readable medium of ~~claim 31 wherein~~ claim 25 wherein said data further includes a flow line image and a scan line image for said part.

33.　　(canceled)

34.　　(currently amended)　The computer-readable medium of ~~claim 31 wherein~~ claim 25 wherein said data further includes ultrasonic transducer characteristics.

35.　　(currently amended)　The computer-readable medium of ~~claim 31 wherein~~ claim 25 wherein said data further includes a proposed sequence of inspection scans.

36.　　(currently amended)　A system for automatically generating an ultrasonic inspection planning for a part. said ultrasonic inspection planning containing information needed to meet specification requirements for an ultrasonic inspection, said system comprising:

means for displaying an input screen for prompting a user to input data relating to said part, said input screen including a section for receiving a revision sheet for said part;

means for calculating inspection parameters from said data; and

means formatting said calculated parameters into an inspection plan document.

37. (original) The system of claim 36 further comprising means for displaying an instruction screen.

38. (original) The system of claim 36 further comprising means for generating an error proofing plot of said part.

39. (original) The system of claim 36 wherein said means for calculating inspection parameters includes calculating one or more of part rotational speed, part surface speed, transducer index speed, pulse repetition rate and scan length.

40. (original) The system of claim 36 wherein said inspection plan document sets forth a sequence of inspection scans for said part.

41. (original) The system of claim 40 wherein said document further includes a flow line image, a scan line image, inspection limits and a revision history for said part.

42. (original) The system of claim 36 wherein said input screen includes a section for receiving part geometry data for said part.

43. (original) The system of claim 42 wherein said input screen includes a section for receiving a flow line image and a scan line image for said part.

44. (canceled)

45. (original) The system of claim 42 wherein said input screen includes a section for receiving ultrasonic transducer characteristics.

46. (original) The system of claim 42 wherein said input screen includes a section for receiving a proposed sequence of inspection scans.